General information or Other (PAR)

Event#

40143

Rep Org: EDERER, LLC

Notification Date / Time: 09/10/2003 12:13

(EDT)

Supplier: EDERER, LLC

Event Date / Time: 09/10/2003 Last Modification: 09/10/2003 (PDT)

Region: 4

Docket#:

City: SEATTLE

Agreement State: Yes

County:

State: WA

License #:

NRC Notified by: JOE HOFF

Notifications: LINDA HOWELL

R4

**HQ Ops Officer: STEVE SANDIN** 

**Emergency Class: NON EMERGENCY** 

JACK FOSTER

MONTE PHILLIPS

NRR R3

10 CFR Section:

21.21

**UNSPECIFIED PARAGRAPH** 

### POTENTIAL SAFETY HAZARD INVOLVING CRANE EMERGENCY DRUM BRAKE

"Subject: 10 CFR, Part 21 notification of potential safety related nonconforming condition.

"This letter serves to notify the Commission of a potential safety related noncompliance in a delivered component as defined in 10 CFR. Part 21.

### "Condition:

"On Friday, Aug. 15, 2003 the Duane Arnold Energy Center (DAEC) notified Ederer that during routine testing of the X-SAM® Single Failure Proof Safety System on Ederer crane S/N F1475, the emergency drum brake would not set consistently. DAEC said the condition was being evaluated in accordance with their 10 CFR, Part 21 reporting procedure. DAEC also said they had re-adjusted the system so it was functioning correctly for use. Ederer reviewed the information provided by DAEC and sent a letter to them on Wednesday, Aug. 20, 2003, which recommended the crane not be used for any safety-related or critical lifts until the X-SAM® Safety System has been thoroughly examined and verified to be in satisfactory operating condition.

#### "Evaluation:

"The crane had been in service since 1983 and this was the first instance where the system did not function correctly. Ederer's Design Engineer for the system traveled to DAEC Saturday Aug. 23, 2003 and examined and tested the system. It was determined that accumulated wear over the life of the assembly resulted in increased friction such that the cable would not slide freely and brake reaction setting force could no longer overcome the resistance of the cable. This resulted in the inconsistent operation of the emergency drum brake noted by DAEC.

"Ederer has requested DAEC send the old cable assembly back to us for a more complete examination. If that examination provides any different results, a supplemental report will be submitted.

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"If allowed to remain uncorrected, this condition constitutes a 'safety hazard' because, in the event of the failure of another component, the loss of the safety function could result in a significant reduction in the degree of protection provided by the crane safety system.

#### "Corrective Action:

- "1.) Ederer notified the other affected user (Point Beach) with the same type of system and advised them not to use their crane for any safety-related or critical lifts until the condition had been evaluated.
- "2.) Ederer replaced the cable assembly and retested the system at DAEC on Sunday, Aug 24, 2003.
- "3.) Even though the Point Beach system was functioning normally, Ederer went to site and replaced the cable assembly and retested the system on Monday, Sept. 1, 2003.
- "4.) Ederer has set a recommended replacement life for this component of 10 years. This is based on 50% of the shortest known useful life of 20 years.

#### "Conclusion:

"Ederer considers this condition to be reportable in accordance with 10 CFR, Part 21, Section 21.3(m). Nuclear plants using this equipment were identified and notified, and the components replaced. There have been no previous similar conditions reported. There was no adverse effect on plant safety or on the health and safety of the public as a result of this condition.

"In summary, Ederer has notified affected users, notified the NRC and taken appropriate corrective action."

"Any questions regarding this report or other Ederer cranes should be directed to: Jim Nelson, Account Manager for Cranes, at jnelson@ederer.par.com. Please provide the following information; customer name, contact person, email address, telephone number, facility, and crane serial number."





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By fax and overnight mail

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001 tel 301-816-5100 fax 301-816-5151

# Subject:

10 CFR, Part 21 notification of potential safety related nonconforming condition.

This letter serves to notify the Commission of a potential safety related noncompliance in a delivered component as defined in 10 CFR, Part 21.

## Condition:

On Friday, Aug. 15, 2003 the Duane Arnold Energy Center (DAEC) notified Ederer that during routine testing of the X-SAM® Single Failure Proof Safety System on Ederer crane S/N F1475, the emergency drum brake would not set consistently. DAEC said the condition was being evaluated in accordance with their 10 CFR, Part 21 reporting procedure. DAEC also said they had re-adjusted the system so it was functioning correctly for use.

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Condition: (continued)

Ederer reviewed the information provided by DAEC and sent a letter to them on Wednesday, Aug. 20, 2003, which recommended the crane not be used for any safety-related or critical lifts until the X-SAM® Safety System has been thoroughly examined and verified to be in satisfactory operating condition.

# **Evaluation:**

The crane had been in service since 1983 and this was the first instance where the system did not function correctly. Ederer's Design Engineer for the system traveled to DAEC Saturday Aug. 23, 2003 and examined and tested the system. It was determined that accumulated wear over the life of the assembly resulted in increased friction such that the cable would not slide freely and brake reaction setting force could no longer overcome the resistance of the cable. This resulted in the inconsistent operation of the emergency drum brake noted by DAEC.

Ederer has requested DAEC send the old cable assembly back to us for a more complete examination. If that examination provides any different results, a supplemental report will be submitted.

If allowed to remain uncorrected, this condition constitutes a "safety hazard" because, in the event of the failure of another component, the loss of the safety function could result in a significant reduction in the degree of protection provided by the crane safety system.

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### **Corrective Action:**

- 1.) Ederer notified the other affected user (Point Beach) with the same type of system and advised them not to use their crane for any safety-related or critical lifts until the condition had been evaluated.
- 2.) Ederer replaced the cable assembly and retested the system at DAEC on Sunday, Aug 24, 2003.
- 3.) Even though the Point Beach system was functioning normally, Ederer went to site and replaced the cable assembly and retested the system on Monday, Sept. 1, 2003.
- 4.) Ederer has set a recommended replacement life for this component of 10 years. This is based on 50% of the shortest known useful life of 20 years.

## Conclusion:

Ederer considers this condition to be reportable in accordance with 10 CFR, Part 21, Section 21.3(m).

Nuclear plants using this equipment were identified and notified, and the components replaced.

There have been no previous similar conditions reported.

There was no adverse effect on plant safety or on the health and safety of the public as a result of this condition.

In summary, Ederer has notified affected users, notified the NRC and taken appropriate corrective action.

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Any questions regarding this report or other Ederer cranes should be directed to: Jim Nelson, Account Manager for Cranes, at jnelson@ederer.par.com. Please provide the following information; customer name, contact person, email address, telephone number, facility, and crane serial number.

Best regards,
Qu HA
Joe Hoff, Vice President & General Manager
Mitt
Steve Hertel, Engineering Manager
Z-France
Les Anderson, Chief Quality Officer
Recipient:
Please sign below to acknowledge receipt of this report and return a fax copy to the attention of Joe Hoff at 206-623-8583.
Received by:
.Date: